

REMARKS

Claims 8-10, 13, 15, 19, 21, 31, and 33 have been amended mainly for greater clarity. The amendments are fully supported by the original specification. For example, support for “at least 80% identity” may be found on page 11, line 9; support for the stringency condition can be found on page 18, lines 16-29; support for the recitation “the polypeptide forms a complex with an mTOR protein” can be found on page 2, lines 25-26; support for the recitation “at least 15 nucleotides” in claim 33 can be found on page 18, lines 9-10. No new matter has been introduced. The amendments are made solely to expedite prosecution of the application, and Applicants reserve the right to prosecute claims of similar or differing scope in subsequent applications.

Applicants respectfully request reconsideration in view of the following remarks. Issues raised by the Examiner will be addressed below in the order they appear in the prior Office Action.

Election/Restriction

The Examiner has acknowledged Applicants’ election, with traverse, of Group III (claims 8-21 and 31-33) and SEQ ID NO: 2 in the Response filed on March 2, 2005.

Claim Rejections under 35 U.S.C. § 112, First Paragraph

Claims 8-9, 13, 15-19, 21, 31, and 33 are rejected as allegedly failing to comply with the written description requirement. Applicants traverse these rejections to the extent it is maintained over the claims as amended.

a. The Examiner rejects claim 8 for being unclear regarding the high stringency conditions during hybridization of the nucleic acids. As described above, Applicants have amended claim 8 to specify the high stringency conditions solely to expedite prosecution of the application. Support for this amendment can be found in the specification (e.g., page 18, lines 16-29). Thus, those skilled in the art would appreciate that Applicants had possession of the claimed nucleic acids as recited in amended claim 8 and its dependent claims.

b. The Examiner rejects claim 13 for lack of the appropriate nucleic acid sequence encoding a rictor polypeptide. As described above, claim 13 has been amended to clarify that

9800557_1.DOC

“the nucleic acid encodes a rictor polypeptide comprising a sequence of SEQ ID NO: 3.” Thus, those skilled in the art would appreciate that Applicants had possession of the claimed nucleic acids as recited in amended claim 13.

c. With regard to claim 15, the Examiner asserts that “the 70% identity does not necessary encodes [a] polypeptide that would have a function of mTOR-AP polypeptide.” Solely to expedite prosecution, Applicants have amended claim 15 to specify that the nucleic acid sequence encodes “a polypeptide that has at least 80% identity to SEQ ID NO: 3, wherein the polypeptide forms a complex with an mTOR protein.” As amended, the mTOR-AP polypeptide in claim 15 is both structurally and functionally defined. Thus, those skilled in the art would appreciate that Applicants had possession of the claimed invention as recited in amended claim 15.

d. With regard to claims 19 and 21, the Examiner requests that the structure of the mTOR-AP polypeptide be provided. Similarly, Applicants have amended claim 19 to specify that the mTOR-AP polypeptide comprises a sequence at least 80% identical to SEQ ID NO: 3 and forms a complex with an mTOR polypeptide such that the mTOR-AP polypeptide is both structurally and functionally defined. Dependent claim 20 has been amended to clarify that the mTOR-AP polypeptide comprises a sequence of SEQ ID NO: 3. Thus, those skilled in the art would appreciate that Applicants had possession of the claimed invention as recited in amended claims 19 and 20.

e. With regard to claim 33, the Examiner asserts that the structure of the primer or probe is impossible to ascertain. Applicants have amended claim 33 to clarify that the probe or primer comprises at least about 15 nucleotides of SEQ ID NO: 3. Support for this amendment can be found in the original specification (e.g., page 18, lines 9-10). Thus, those skilled in the art would appreciate that Applicants had possession of the claimed invention as recited in amended claim 33.

According to the most recent version of the *Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, ¶1, “Written Description” Requirement*, which appeared in the Federal Register in January 2001, Vol. 66, No. 4, pp. 1104-1111:

“sufficient description of a representative number of species by actual reduction to practice..., reduction to drawings..., or by disclosure of relevant, identifying

characteristics, *i.e.*, structure or other physical and/or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the claimed genus....” (emphasis added)

While the Examiner appears to be requiring physical and/or chemical properties, these are obviously not required by the Guidelines – the relevant structures have been disclosed, as have the structures of several species within the claimed genus. Moreover, the generation of the subject nucleic acids and polypeptides was well within the purview of a skilled artisan at the time the application was filed, and could be performed readily using routine technology like recombinant molecular biology as disclosed in the application.

In addition, the present application describes sufficient examples to support the genus of nucleic acid molecules (e.g., pages 14-15). Therefore, Applicants respectfully submit that the present application as filed conveys with reasonable clarity to those skilled in the art that the Applicants were in possession of the claimed invention as of the filing date.

For the reasons stated above, Applicants respectfully request that the Examiner reconsider and withdraw this rejection under 35 U.S.C. § 112, first paragraph.

Claim Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 8-9, 13, 15, 17-19, 21, 31, and 33 are rejected under 35 U.S.C. § 112, second paragraph, as being allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. To expedite prosecution, Applicants have amended the claims to incorporate the Examiner’s suggestions. Such amendments are not made in acquiescence of the rejection, and Applicants reserve the right to prosecute claims of similar or differing scope.

a. Applicants have amended claims 8, 9, and 15 by using the phrase to express percent identity suggested by the Examiner.

b. As described above, Applicants have amended claim 8 to more specifically define the phrase “high stringency.”

c. As described above, Applicants have amended claim 13 to clarify the structure of the rictor polypeptide.

9800557_1.DOC

d. As described above, Applicants have amended claims 19 and 21 to define the structure of the mTOR-AP polypeptide.

e. As described above, Applicants have amended claim 33 to more particularly define the structure of the probe or a primer.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw all rejections under 35 U.S.C. § 112, second paragraph.

Claim Rejections under 35 U.S.C. § 102(a)

Claims 8(a), 15, 31, and 33 are rejected under 35 U.S.C. § 102(a) as being allegedly anticipated by Ohara et al. (DNA Res., 2002, 9:47-57). Applicants traverse these rejections to the extent it is maintained over the claims as amended.

Solely to expedite prosecution, Applicants have amended independent claims 8, 15, and 31 to recite that the subject nucleic acid has at least 80% identity to SEQ ID NO: 2. Support for the amendments can be found throughout the specification (e.g., page 11, line 9). Please note that claim 31 has been converted to an independent claim which includes all the limitations of claim 8, from which it was depending. No new matter has been introduced.

The claims as amended are not anticipated by Ohara et al. Ohara et al. disclose sequences that are about 75% identity to SEQ ID NO: 2 or SEQ ID NO: 3. Accordingly, the cited reference fails to meet the limitations of the present claims and thus fail to anticipate the claimed subject matter. For the same reasons, the claims that depend from claims 8, 15, and 31 are not anticipated by Ohara et al.

In view of the above amendments and remarks, reconsideration and withdrawal of this rejection are respectfully requested.

CONCLUSION

The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Should an extension of time be required, Applicants hereby petition for same

Application No.: 10/782244

Docket No.: WIBL-P01-010

and request that the extension fee and any other fee required for timely consideration of this submission be charged to **Deposit Account No. 18-1945**, under Order No. **WIBL-P01-010**.

Dated: August 30, 2005

Respectfully submitted,

By 

Z. Angela Guo

Registration No.: 54,144

ROPES & GRAY LLP

One International Place

Boston, Massachusetts 02110-2624

(617) 951-7000

(617) 951-7050 (Fax)

Attorneys for Applicant